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## The promise of endogenous potential in times of crisis – Analysis of the effects of the COVID pandemic on the socio-economic embeddedness in local economies

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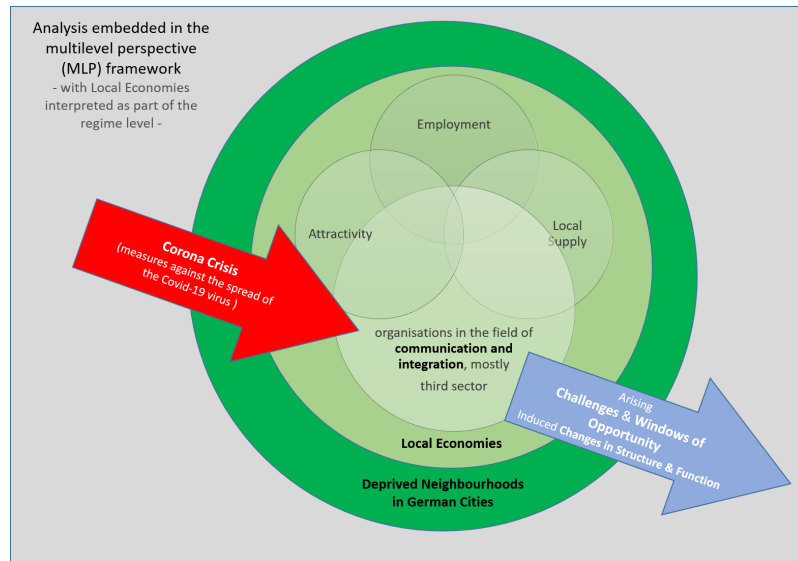
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**Abstract.** The measures against the spread of the COVID virus have massive effects on local economies. By means of an exploratory qualitative case study in deprived inner-city neighbourhoods in the cities of Mönchengladbach and Krefeld in Germany, this paper explicitly aims at examining the COVID pandemic's impact on their endogenous potential. In this context, the focus lies on organisations which contribute to the local economy's function of integration and communication. The analysis is based on theoretical concepts of the local economy, but it also refers to crisis as well as transition management research, especially the multilevel perspective framework. By means of desktop research, a focus group with multipliers involved in local economic contexts as well as thirteen guideline-based interviews with the heads of local organisations, the subsequent analysis reveals the partially counteracting effects of the COVID pandemic on the organisations' socio-economic embeddedness. On the one hand, they are threatened by economic bottlenecks, by pending social consequences of a longer period with restrictive regulations as well as by fear of contagion and exhaustion. While the organisations' perceived level of urgency varies greatly, their level of uncertainty is generally high. On the other hand, organisations of the local economy benefit from a positive push in the areas of digitization and new life and working environments (home-based work), as well as from a strengthening of local solidarity and cohesion.

### 1 Introduction

The measures against the spread of the Covid virus accelerate and intensify the structural change processes and its associated problems in local economies, especially in already deprived neighbourhoods. Faced with such challenges, one can observe an increased focus either on acquiring external support for local economic actors or on the recollection of neighbourhoods' endogenous potential in hope of mitigation.

To the best of the authors' knowledge, research regarding the effects of the COVID pandemic on the local economy is still strongly limited. To narrow this research gap, this analysis is based on research regarding local economies, a field of research characterised by its evidence-based development without clear theory-based references (Henn, Behling 2019). Therefore, the confrontation with theoretical considerations might help improve the understanding of local economic contexts. To this end, the authors adopt reflections from crisis research as well as the multi-level-perspective (MLP) framework from transition management research.



Source: own representation

Figure 1: Visualization of the research question

The aim is to analyse the impact and potential outcomes of the COVID pandemic, as a major crisis, on local economies in deprived neighbourhoods in the medium-sized cities of Mönchengladbach and Krefeld in the Middle Lower Rhine region in Northrhine-Westfalia, Germany. A special focus is placed on organisations committed to the function of communication and integration, as illustrated in Figure 1.

The overarching research question is operationalised as follows:

- What are the major challenges of organisations committed to communication and integration in the local economy? To what extent do those challenges reflect the typical characteristics of a crisis?
- What windows of opportunity do organisations committed to communication and integration perceive in the local economy? How lasting and thus transforming are the applied measures, especially in relation to the MLP framework?
- How do change processes induced by those potential windows of opportunity reflect in the discussion on the preservation or collapse of structure versus function?

The analysis is built on the assumption that a major function of the local economy is to strengthen communication and integration in the neighbourhood and thereby the mobilisation of endogenous potential, which in turn can help improve the overall development of the neighbourhood.

The case study is based on a comprehensive literature review, a focus group interview and thirteen guideline-based interviews. The interviews have been conducted with heads of locally embedded, community-oriented organisations in deprived neighbourhoods in the cities of Mönchengladbach and Krefeld in the Middle Lower Rhine region in Germany. Due to the functional focus on communication and integration, most of the selected organisations belong to the so-called third sector (see Section 2.1).

The analysis reveals the partially counteracting effects of the COVID pandemic on the endogenous potential in local economies. On the one hand, locally embedded organisations are threatened by economic bottlenecks, the pending social consequences of a longer period without or with minimized range of services and products offered as well as fear of contagion and exhaustion. While the organisations' perceived level of urgency varies greatly, their level of uncertainty is generally high. On the other hand, locally embedded organisations benefit from a positive push in the areas of digitization and new life and working environments (home-based work), as well as from a strengthening of local solidarity and cohesion.

Table 1: Concepts and terms relevant to the case study, own representation

Concepts and terms from local economy research	Concepts and terms from crisis research	Concepts and terms from transition management research
<ul style="list-style-type: none"> <li>• local economy (sector classification and functions, especially communication and integration)</li> <li>• (socio-)economic embeddedness</li> <li>• deprived neighbourhood</li> <li>• endogenous potential</li> <li>• solidarity and cohesion</li> </ul>	<ul style="list-style-type: none"> <li>• crisis characteristics: (existential) threat, urgency and uncertainty</li> <li>• conceptualization of crises in different research streams</li> <li>• productive functions of crisis</li> <li>• typology of change processes in relation to the preservation or collapse of structure versus function</li> </ul>	<ul style="list-style-type: none"> <li>• specific features and relevance of the local level</li> <li>• concept of proximity</li> <li>• MLP framework with a focus on the development and diffusion of innovations</li> </ul>
concept of “windows of opportunity” appears in all three research streams (connecting link)		

The introduction (Section 1) is followed by explanations of the theoretical background considerations (Section 2). Subsequently, the applied methodology is presented (Section 3), including the reason regarding the selection of the interviewees. This section is followed by the analysis (Section 4). It includes both, the challenges and opportunities of local organisations in dealing with the COVID pandemic and an assessment of structural versus functional adaptation processes. The findings are discussed in Section 5, including policy recommendations. Section 6 presents a conclusion and further research questions.

## 2 Theoretical Background

The conceptual framework is inspired by three different research streams: local economy, crisis and transition management research. The following table illustrates the concepts and terms relevant to the case study (see Table 1). The idea of “windows of opportunity” is voiced in all three research streams and represents a connecting link between them.

### 2.1 The Promise of Endogenous Potential in a Local Economy

There is no universal definition for “local economy” (Henn, Behling 2019). In the context of this research, it can be broadly understood as comprising all economic activities referring to the development of a spatial unit, preferably a neighbourhood (Birkhölzer 2000). Although the primary focus of this concept is on economic activities, it is an integrative approach including social and ecological perspectives aiming at the enablement of sustained economic activities.

The original classification of Birkhölzer (2000) divides the local economy into three sectors: the first (private) sector, the second (public) sector and the third sector, which is constituted like the private sector, but primarily addresses social concerns. However, it should be taken into account that this classification is not clear-cut, and there are many overlaps between the sectors.

Typically, a local economy is oriented towards four functions: local supply (retail sector), employment (creation of jobs and training positions close to home), upgrading (supply diversification, combating vacancies, reducing population loss) as well as communication and integration (strengthening local economic cycles, mobilization of endogenous potential) (Henn et al. 2019).

As many of the organisations committed to the function of communication and integration can be found in the so-called third sector, the authors assume that this sector is highly relevant for the local economy and the mobilisation of endogenous potential. The literature offers various definitions for the third sector. In the context of this paper, the authors base their reflections on the definition of the third sector proposed by the third or social-economy (TSE) concept (Salamon, Sokolowski 2018)<sup>1</sup>. This definition covers the German non-profit associations as well as the church- or university related welfare organisations which were interviewed in this case study. According to the TSE concept, the role of these organisations is to address social concerns and to mobilize volunteer activity (Salamon, Sokolowski 2018). This is necessary whenever it is not economically attractive for the private sector to get involved, and in cases where the beneficiaries are dependent on state assistance but the public sector cannot provide the required type and nature of the services and assistance, especially if those are highly individual (Schubert, Klein 2018).

A much discussed characteristic of local economies is “local embeddedness” (Läpple, Walter 2003). It refers to the embeddedness of a neighbourhood’s economy in broader contexts, such as the regional or global economy. But – as is the case in this contribution – it also refers to the embeddedness in local actor structures, also referred to as socio-economic embeddedness (Granovetter 1985) or “social embedding / anchoring” (Henn, Behling 2019, p. 6).

The concept of socio-economic embeddedness was prominently addressed by Granovetter (1985). He argues that “the behaviour and institutions to be analysed are so constrained by ongoing social relations that to construe them as independent is a grievous misunderstanding” (Granovetter 1985, p. 482). The embeddedness argument highlights the importance of personal relations for building trust and preventing misconduct. The local level has a greater role to play in this argument, as the spatial proximity it provides increases the chances of getting to know your counterpart personally. But spatial proximity is not a compulsory requirement in times of digitization. In his work, Granovetter (1985) emphasises the general applicability of the concept, and indeed, its application to the local economic context can be traced in existing literature (e.g. Boschma 2005, Wittmayer, Loorbach 2016).

According to Läpple, Walter (2003), the local embeddedness mainly results from four aspects. First, the customers of the business mostly come from the neighbourhood or via cooperation partners working together with the locally based business in the production or marketing of goods or services. Second, the employees live in the neighbourhood where they work. Third, the business owners live in the building, where their (work)shop is located or in the immediate vicinity. Forth, the local context has the function of a business contact or information exchange platform and provides information regarding potential employment and cooperation opportunities or the initiation of new business relationships. The last argument is especially closely related to the function of communication and integration. With regard to the residents but also people from other parts of the city, gastronomic businesses fulfil a particularly important task as a meeting place for information exchange (Jakubowski, Koch 2009, p. 242).

Locally embedded businesses have a close interrelationship with their neighbourhood, which is expressed in a twofold way. On the one hand, they have a decisive influence on the quality of work of the employees and the quality of life of the residents in the neighbourhood; on the other hand, they are dependent on various location factors and possible synergy effects, which can entail both, development opportunities and obstacles (Läpple 2013, p. 135). The underlying assumption is, that a strengthened socio-economic embeddedness favours an overall positive neighbourhood development, as local economic actors are more concerned with their neighbourhood’s development.

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<sup>1</sup>According to this concept, to be considered as part of the third sector, entities must exhibit the following five features: organisations (in terms of “some institutional reality”), private (in terms of “not being controlled by government”), self-governed (in terms of bearing “full responsibility for economic risks or rewards”), noncompulsory (in terms of “participation with the organisation must be free of compulsion or coercion”) and totally or significantly limited from distributing any surplus they earn to investors, members or other stakeholder (Salamon, Sokolowski 2018).

In the context of this paper, the term “deprived neighbourhoods” refers to the definition used in the German urban development programme “Soziale Stadt” ([Deutsches Institut für Urbanistik 2003](#)). It relates to “highly densified and densely populated neighbourhoods in urban areas that show considerable deficits with regard to their social structure, the building stock, the range of jobs, the level of education, the provision of social and neighbourhood cultural infrastructure, the quality of the housing, the residential environment as well as the overall environment” ([Deutsches Institut für Urbanistik 2003](#), p. 298; author’s translation). These deficits are often caused and exacerbated by socio-spatial segregation. They mostly concern inner-city or near the inner-city (industrial) neighbourhoods as well as large housing estates on the outskirts ([Krummacher et al. 2003](#)).

In search of development options for deprived neighbourhoods, the local economy is often discussed in connection with endogenous potential. A comprehensive overview regarding the varying operationalisations of this term in theoretical concepts is given by [Antonescu \(2015\)](#). However, within the scope of this contribution, endogenous potential is understood along the lines of [Rommelspacher \(1997\)](#). He defines endogenous potential as the opportunities arising from existing sector structures and their interconnections, historically and culturally co-determining factors as well as people and institutions, that can be involved in local-economic development strategies either because of their mission (e.g. welfare associations, church communities, local associations) or because of specific, local interests. This understanding of endogenous potential stresses that a sole focus on private sector actors is not enough to deal with the challenges faced by deprived neighbourhoods. Following this line of thought, the mobilization of all actors, including non-economic actors and non-market-mediated forms of welfare production, seems necessary ([Rommelspacher 1997](#)). In this regard, [Birkhölzer \(2000\)](#) emphasises that a positive development of deprived neighbourhoods from endogenous potential is only possible, when a community or at least parts thereof act with an economic mind-set. [Brandt, Gärtner \(2016, p. 6\)](#) also argue that “the entire economic activity in a neighbourhood should be taken into account and that the exchange processes and networks between private/commercial, public/communal, the creative sector, the pioneers and do-gooders as well as the informal/non-governmental sector should be examined and promoted or initiated” (author’s translation). [Läpple, Walter \(2003\)](#) specify that the main ingredients for the development of endogenous potential by groups of civil society actors are local embeddedness, trust and acceptance in a community. In addition, [Birkhölzer \(2000\)](#) argues that places are unique, and that their richness derives from the specific combination of individual factors, i.e. in the synergies resulting from endogenous potentials.

The described concept of endogenous potential is closely connected to the willingness to take responsibility for other community members, not just for one’s own interests. Accordingly, solidarity is described by [Bude \(2020, p. 26\)](#) as “practices of responsibility for others” (authors’ translation). This understanding of solidarity is closely related to Durkheim’s ‘mechanical solidarity’ referring to a shared “collective conscience, a common body of beliefs and sentiments that give individuals a feeling of belonging to the group” ([Giuffrè 2013, p. 31](#)). Alternatively, a rather network-based understanding of solidarity relates to ‘cohesion’ in terms of “the degree to which members of a community are actually tied to each other, either directly through personal contact or indirectly through joint group membership” ([Giuffrè 2013, pp. 31-32](#)).

[Birkhölzer \(2000, p. 13\)](#) discusses the role of “windows of opportunity” fuelled by endogenous potential as follows (authors’ translation): “In crisis regions (...), the local level of action and thus the community plays a key role, whereby the disintegration associated with the crisis – possibly previously regarded as irrefutable or overpowering – from interdependencies (...) can also be seen as an opportunity for a new beginning, an independently defined development (or independent regional development)”. This positive notion can also be found in literature on crisis research.



## 2.2 Crisis as an Opportunity

Crises are conceptualized differently in a variety of disciplines. In the context of disaster research, [Boin, 't Hart \(2007\)](#) refer to a crisis as the gap between an actual and a desired state, which simultaneously fulfils the following three characteristics: (existential) threat, urgency and uncertainty. The existential threat relates to major societal assets. In the case of the COVID pandemic, those include, amongst others, public health, economic interests and behavioural patterns of social interactions. The characteristic of urgency points to the need for action, despite high levels of uncertainty. Inactivity would aggravate the situation, e.g. cause the uncontrollable spread of the COVID virus. The willingness to become active and to cooperate is further strengthened by the perception of external threat ([Stöhr 1992](#)). The final characteristic of uncertainty is the lack of knowledge of what will happen in the future and how individual options for action will impact the overall situation ([Brinks, Ibert 2020](#)).

In contrast to the above mentioned idea of fast intervention due to high urgency, [Birkhölzer \(2000\)](#) argues that organized economic self-help (the mobilization of endogenous potential) is rather delayed in communities hit by a crisis in the context of structural change processes caused by deindustrialisation and globalisation. According to him, the process of organized economic self-help in communities only commences after a phase of prolonged waiting and vain hope for relief as a result of external remedies from above (the state) or from outside (investors). Perhaps the reason for this is that the onset of this type of crisis is less immediate and is therefore perceived as less urgent.

Unlike a catastrophe, the term crisis leaves room for manoeuvre to improve the situation. Or, in other words, a positive course of events is still possible, depending on agents' individual or collective will and power to create it ([Kornberger et al. 2019](#)). These considerations emphasize the importance of human agency, defined as "the ability of people to act, usually regarded as emerging from consciously held intentions, and as resulting in observable effects in the human world" ([Gregory 2009](#), p. 347). These reflections also lead to the questions of what (windows of) opportunities are perceived, and how they are exploited during a crisis.

As mentioned above, the connection to the terminologies of crises and (windows of) opportunity rests also in the considerations of local economy research. It is expressed in the assumption that a crisis can act as an opportunity for reset, a new starting point for a more independent local economic development ([Birkhölzer 1993](#)). However, it should be borne in mind that Birkhölzer's remarks refer to structural change-induced, spatially limited economic and employment crises, i.e. situations in which the activation of endogenous potentials can be verifiably helpful ([Stöhr 1992](#)). As [Stöhr \(1992, p. 8\)](#) argues, in the case of restructuring processes in old industrial core areas of Europe, "the magnitude of crisis symptoms surpassed central government capacity" and triggered strong local initiatives. However, the COVID crisis has a different background and global impact. Although local economies and their actors are certainly among those affected, it is not an economic crisis at its core, and the medium- to long-term consequences for local economies are still unclear. This is particularly important when considering that the study period for this paper was shortly after the so-called first wave of the COVID crisis in Germany.

Within transition management research, a crisis is conceptualised as an event or chain of events, which has the power to lead to systemic changes in terms of transitions towards sustainability. It is yet unknown whether the COVID crisis will fall into that category.

Nevertheless, specifically referring to the COVID crisis, [Schneidewind et al. \(2020\)](#) predict three main areas (proximity, publicity, agility) for windows of opportunity towards a more sustainable development on the local or rather urban level. Amongst others those include a greater cohesion within and between neighbourhoods and municipalities as well as the expansion of local economic cycles. According to [Schneidewind et al. \(2020\)](#), the crisis highlights the meaning of local solidarity.

Contrary to the generally rather negative connotation of the concept of crisis, [Newig \(2013\)](#) elaborates on four productive functions for sustainable development that are inherent in crises, and underlines the importance of agency. These functions include learning from failed attempts, triggering adjustments in existing systems towards sustain-

Table 2: Typology of change processes in relation to the preservation or collapse of structure and function

Intensity of the dimensions	Structure Preservation	Structure Collapse / complete reorientation
Function Preservation	Type 0: Stable System	Type 1: System-Transformation / Adaptation
Function Collapse / complete reorientation	Type 2: Path-dependent reorientation	Type 3: System Collapse / completely new creation

Source: own representation based on Newig (2013, p. 142)

ability, the targeted use of destabilization of non-sustainable structures as an instrument for creating space for the development and implementation of more sustainable structures, and the targeted management of decay processes to achieve a new desirable state. Newig's explanations are based inter alia on considerations of Luhmann (2018) regarding social systems and the ecology-oriented panarchy approach developed by Gunderson, Holling (2002). In both schools of thought, crises are assigned a productive and renewing function. Following this logic, systems are dependent on constant disintegration, as ongoing disintegration creates space and demand for successor elements. Disintegration is thus a necessary contributory cause of reproduction. Accordingly, a crisis serves to ensure the incessant renewal of the system elements and not, as in classical equilibrium theories, to return to a stable state of rest after absorption of disturbances. In this context, Newig (2013, p. 137) also refers to "dynamic stability". Brinks, Ibert (2020) are not so clear in this respect. They offer a description of a typical course of a crisis in phases, which ends with the "(re)turn to [a] (new) normality" (Brinks, Ibert 2020, p. 4). Overall, these considerations suggest that the local economy and its reactions to the COVID crisis are best analysed from a process perspective.

Referring to the productive functions inherent in a crisis, it seems obvious that a destabilization alone does not lead to more sustainable structures. The central question is therefore: under what conditions and to what extent do destruction and destabilization actually lead to innovation<sup>2</sup> and a positive system transformation (Newig 2013). This consideration is also applicable to the context of local economy and the COVID pandemic. A useful tool for structuring possible scenarios is the typology of change processes in relation to the preservation or collapse of structure<sup>3</sup> versus function developed by Newig (2013). As illustrated in Table 2, a stable system (type 0) is characterized by the preservation of structure and function. System-transformation or rather adaptation (type 1) occurs when the function is preserved while the structure collapses and needs to be reorganized. In contrast, a path-dependent reorientation (type 2) is characterized by the preservation of structure while the according function collapses. The last type (type 3) of complete system collapse is marked by structural as well as functional collapse. However, in practice, the change processes during a crisis are highly dynamic, overlapping and are therefore hard to delimit. It is less about complete collapse, but rather about tendencies in the context-related interaction of structure and function.

### 2.3 From Crisis to Sustainable Transition

Relating above considerations to urban sustainability transition management research, it is important to highlight the role of neighbourhoods as basic building blocks of cities, which simultaneously combine the core problems of sustainability as well as all the elements for their solution (Broccoli 2018). There is a considerable overlap between

<sup>2</sup>An innovation is defined as "an idea, practice, or object that is perceived as new to an individual or another unit of adoption" (Rogers 2003, p. 1).

<sup>3</sup>Newig (2013) suggests ten social structural categories relevant to sustainability, which mostly are applicable to the local economy: states and societies, organisations, social-ecological systems / utilization systems, socio-technical systems, built environment: urbanization, built structures, culture and social cohesion, social capital, civil society, education, values and norms, networks, regulation / governance: laws and process forms, communication systems (Luhmann) and public opinion and awareness.



the prerequisites for successfully releasing endogenous potential at the local level and the local level's relevance for comprehensive, overarching transformation processes toward sustainability. In this regard, Vázquez Barquero (2002) outlines the connection between the theory of proximity and the development of endogenous potentials in urban contexts. The smaller spatial unit promotes personal proximity<sup>4</sup> and hence does justice to “the human measure” (Brocchi 2019, p. 250). It enables an emotional identification with the neighbourhood, facilitates social interaction and has a positive effect on relationships of trust. This shapes the sense of community, enables collective action (synergies) and promotes the experience of self-reliance and self-efficacy (Brocchi 2019).

A well-established concept in the transition management literature is the multilevel perspective (MLP) framework. The framework consists of three levels. The niche level describes protected spaces, where innovations can flourish (Geels 2011). The regime level comprises technologies, institutions and actors (Holtz et al. 2008). The subordinate landscape level encompasses norms and values or rather “a set of deep structural trends” (Geels 2002, p. 1260). According to Geels (2002), radical innovations are usually generated in niches, while incremental innovations are created on the regime level. Changes on the landscape level are even harder to realize and are slower. But once achieved, they can generate new opportunities for niches and put pressure on the regime level for change (Smith et al. 2010).

One of the framework's ideas is that all three levels need to convene in order to promote change or rather a transition. First, innovations need to be developed and wait to be exploited on the niche level (bottom-up pressure). Second, values, norms, etc. on the superordinate landscape level need to have evolved demanding changes on the regime level (top-down pressure). Third, a crisis or shock needs to destabilize the status quo of the regime level providing new scope for action or rather a so-called “window of opportunity” (Grin et al. 2010, p. 88). From a multilevel perspective, the authors argue that the COVID pandemic can be interpreted as an external shock to the system resulting in a destabilization of the regime (local economy) and thus creating many challenges as well as windows of opportunity for change. The latter include opportunities for the diffusion of innovations from the niches on the regime level in order to adapt to the new circumstances, changing the regime but also the landscape. In this regard, it is important to consider that the diffusion process is not the starting point of an innovation but “that relevant activities and decisions usually occurred long before the diffusion process began” (Rogers 2003, pp. 136-137), typically on the niche level.

### 3 Methodology

The exploratory single case study was realized in the medium-sized cities of Mönchengladbach and Krefeld in the Middle Lower Rhine region in Northrhine-Westfalia, Germany (see Figure 2).

The locations were selected because they qualify as “deprived neighbourhoods” in a twofold way<sup>5</sup>. The above mentioned challenges of deprived neighbourhoods are often found in cities that underwent massive structural change processes in the course of globalisation or rather de-industrialisation. This is also true in the case of the crisis in the textile and clothing industry in Mönchengladbach and Krefeld. The migration of the textile and clothing production since the 1960s transformed both cities into typical examples of old industrial towns showing the classic symptoms of deprived neighbourhoods. In addition, the omnipresent crisis in the retail trade in Germany did not leave Mönchengladbach and Krefeld unaffected either. The rise of online trading, declining customer frequencies and struggling local retail reinforce functional change processes in both inner-city areas. The situation is further aggravated by the COVID crisis (Bunzel, Köhl 2020).

<sup>4</sup>Personal proximity refers to “cities as living environments in which people have personal, emotional, and social stakes, including socially embedded relations and a level of trust” (Wittmayer, Loorbach 2016, p. 15). The different notions of proximity are further elaborated in the work of Boschma (2005).

<sup>5</sup>Both inner-cities participate to date in urban development programs applying the definition of deprived neighbourhoods presented in Section 2.1 (Bundesministerium des Innern, für Bau und Heimat 2021).

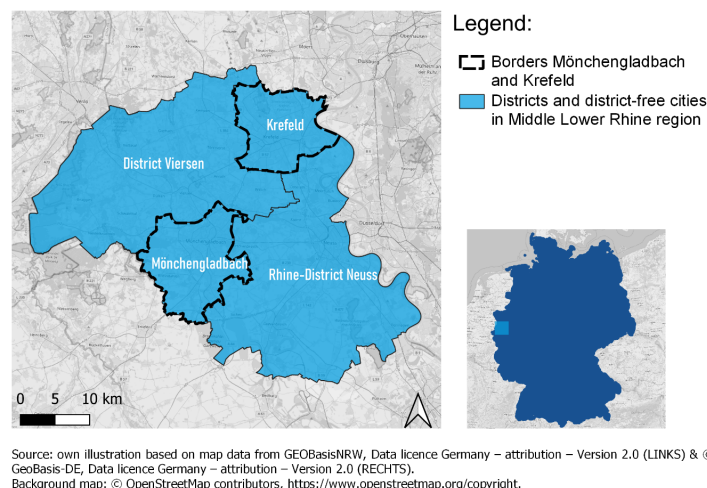


Figure 2: Map of the Middle Lower Rhine region in Germany

Most of the interviewees are from organisations located in or in close proximity to the inner cities. Their services and products are primarily aimed at the neighbourhoods' residents, but are also available to the entire city (or even regional) audience. In both cases, the residents of the inner-city neighbourhoods can be characterised as younger, poorer and more culturally diverse with higher shares of unemployment and more individuals receiving transfer payments compared to the citywide average (Hamm et al. 2017, Stadt Krefeld 2020, Stadt Mönchengladbach 2019). Although both (inner-)cities have individual characteristics, they are understood as largely homogeneous in the face of the challenges described above and therefore considered as one unit in the context of this case study<sup>6</sup>.

The research questions were initially addressed by means of a focus group discussion (on the 13<sup>th</sup> of July 2020) with six multipliers working in several fields related to local economy development<sup>7</sup>. Subsequently, thirteen exploratory guideline-based interviews were conducted between the 17<sup>th</sup> of August 2020 and the 14<sup>th</sup> of October 2020, or rather some months after the end of the first lockdown (22<sup>nd</sup> of March until the 30<sup>th</sup> of April 2020 (Mitteldeutscher Rundfunk 2020)) and two weeks before the announcement of the more stringent measures for November 2020 (second light lockdown in Germany).

Regarding the choice of interviewees, three selection criteria were applied. First, the organisation's affiliation to the local economy as discussed in Section 2.1. This includes entrepreneurial activity in the broadest sense as well as its embeddedness in the local economy (see criteria in Section 2.1). Second, with reference to the four functions of the local economy, all the selected organisations provide services that are closely linked to integration and communication. With exception of a gastronomy business (private sector) and a cultural office (public sector), all interviewed organisations belong to the TSE sector (see definition in Section 2.1). As illustrated in Table 3, the selected organisations are involved in areas of community development, art and culture, integration, youth, adult and family education, sustainability-oriented initiatives and gastronomy – activities that inherently promote communication and integration. More than half of the organisations work closely with volunteers, thereby contributing to the mobilization of endogenous potential; bringing people together is even part of their official mission. Third, the interviews were conducted with the heads of the corresponding organisations to ensure a comprehensive perspective on the organisations' problems and windows of opportunity related to the COVID pandemic.

Table 3 indicates the organisations' names, fields of activity, forms of organisation, locations (city) and sectors.

<sup>6</sup>A location-based comparison of the interview results was carried out, but did not yield any relevant differences, which is why it will be dispensed within the context of this contribution.

<sup>7</sup>A complete overview of the focus group participants can be provided on request.

Table 3: Overview of organisations included in the case study

Organisation	Field of activity	Form of organisation	City	Sector
Krefelder Kunstverein e.V.	art and culture (organisation of exhibitions and the like)	non-profit-making association	Krefeld	TSE
Bürgerinitiative Rund um St. Josef e.V. (Jugendfreizeitstätte, Jugendkunstschule, Familien- und Weiterbildungsstätte)	youth work, youth and family education, art and culture	non-profit-making association	Krefeld	TSE
Kulturfabrik Krefeld e.V.	art and culture (organisation of exhibitions, concerts and the like)	non-profit-making association	Krefeld	TSE
Kulturbüro Krefeld	art and culture (organisation of exhibitions, concerts, theatre performances and the like)	part of the city administration	Krefeld	second (public) sector
Repair Café Krefeld	repair Work	volunteer initiative at LAKUM, the catholic university center (Facility of the Diocese of Aachen)	Krefeld	TSE
Katholisches Forum	adult and family education	non-profit-making association	Krefeld	TSE
Nachbarschaft Samtweberei gGmbH	co-Working spaces	non-profit private limited company	Krefeld	TSE
Repair Café Mönchengladbach	repair Work	volunteer initiative at non-profit-making association "Deutscher Paritätischer Wohlfahrtsverband Landesverband Nordrhein-Westfalen e.V."	Mönchengladbach	TSE
Mönchengladbach im Wandel e.V.	operation of community gardens, environmental protection and education	non-profit-making association	Mönchengladbach	TSE
Kulturküche e.V.	integration and rehabilitation of addicts, Café business, art and culture (event location)	Employment and socio-cultural project of the non-profit Intres gGmbH	Mönchengladbach	TSE
Kulturlöwe Niederrhein e.V.	art and culture, cultural participation, families and cultural encounters	non-profit-making association	Mönchengladbach	TSE
Verein Wohlfahrt e.V.	support and reintegration of homeless	non-profit-making association	Mönchengladbach	TSE
Club der Wirte	representation of interests for gastronomes in Mönchengladbach	informal representation of interests	Mönchengladbach	first (private) sector

Source: own representation

Note: TSE ... Third or social economy

The standardized interview guide included questions about the interviewee's own function and general information on the represented organisation (year of foundation, form of organisation, number of employees and type of employment, mission, local reference, field of activity, funding, etc.). It also addressed the challenges caused by the COVID pandemic, implemented and planned (counter)measures and innovations as well as an assessment of the future development of their organisation and the local economy in the next months.

The conducted interviews were examined via qualitative content analysis according to Mayring (1994). First, relevant items were derived from the interview material. Second, these items were structured in categories<sup>8</sup>. Third, the categorised items were analysed

<sup>8</sup>Following this approach, it turned out that the mentioned challenges could easily be sorted according

in a cross-tabulation across all interviews. The resulting overview allowed for a clear identification of the frequency of the mentions of each category, providing indications regarding its relevance.

With regard to limitations, it should be kept in mind that the findings presented in the analysis and discussion sections are the result of a limited number of interviews held in a very specific context. Applying the findings and recommendations to other (locational) settings should be done with care, as the preconditions there might be quite different.

## 4 Analysis

In relation to the first so-called “lockdown” in Germany (22<sup>nd</sup> of March until the 30<sup>th</sup> of April 2020) and the following weeks, the participating organisations can be divided into three groups:

- those which stopped all activities (mostly due to legal requirements),
- those which were not allowed to offer their typical services and products but used the time otherwise and
- those which could operate and adapted their services to fit the new circumstances.

To the authors’ knowledge, none of the organisations remained completely unaffected, but while some had to stop all activities, others could almost pursue business as usual. This variance is already a first indication of the diversity of the impact of the COVID pandemic on the local economy.

### 4.1 *Challenges along the key characteristics of crisis*

The analytical findings regarding the challenges for the local economy during the first wave of the COVID crisis will be presented in the following section alongside the three main dimensions of a crisis – (existential) threat, urgency and uncertainty –, as outlined in Section 2.2.

#### 4.1.1 (Existential) Threat

According to the analysis, the threat concerns three main dimensions: first – the threat to social livelihood due to cancelled or minimized range of services and products offered; second – the threat to economic livelihood; and third – the threat to individual health from the virus itself.

**Threat to social livelihood:** The perception and impact of this threat varies greatly depending on the services and products offered and the concerned target group. While the services of a volunteer art association targeting better off pensioners from the educated middle-class seem dispensable for a few months, the clientele of meal centres for the homeless will have a hard time without them. In this regard, the dependency of local public welfare services concerns especially the already disadvantaged or marginalized social groups. Other examples from the interviews concern children and youth from low-income families or the elderly, who are confronted with loneliness and isolation by breaking away from socially engaging offers. As their accessibility to services could already be a challenge before the COVID pandemic, it became even more difficult. Nonetheless, all social groups feel the impact of the measures against the spread of the COVID virus to a certain extent in their daily lives. In this sense, the threat consists of the hardly accessible social consequences of a longer crisis period.

**Threat to economic livelihood:** The negative economic effects are omnipresent. They affect amongst others the traditional retail trade and chain store business, but also gastronomy and the culture and event industry (Clemens et al. 2020). The latter two suffer from underutilization of their premises due to social distance regulations or complete closure.

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to the three main characteristics of a crisis.

The change in the legal regulation in Germany, which restricted non-profit associations to building up financial reserves only to a very limited extent (§55 Abs.1 Nr.5 AO, 2013, BGBl. I p. 556), was especially significant to most of the interviewees. As a result of this change non-profit associations are left ill-equipped to operate for several months without or with reduced income in the event of a crisis. This is especially true if they do not have any kind of third-party basic funding, e.g. from the municipality.

Almost all interviewees confirmed the financial survival of their organisations until the end of the year 2020. The only exception was the representative of the gastronomy business, who predicted that half of the gastronomic facilities in his city would close by the end of the year (interview 9). For the rest, the spectrum of economic threat is very wide, ranging from concerns about survival beyond 2020 to the relaxed certainty that basic funding will continue unaffected by the crisis. But the mood among organisations without or with little external subsidies was very critical. Since the end of the pandemic was not in sight at the time, the interviewees expressed their concerns regarding developments over the next one to three years.

**Threat to individual health:** This threat translates into potential customers' fear of contagion, a frequently mentioned aspect in the interviews. For parts of the population, it leads to reluctance to participate in events, restaurant visits, etc. and thus limits the utilization of the said events. This can lead to events or establishments, with an already reduced number of seats due to social distance regulations, being not fully utilized. Thus, the economic efficiency of the corresponding organisations is affected in a twofold way.

The fear of contagion, however, does not only affect the profitability of several organisations, but also their core activities or rather their mission. This is especially true for the function of integration and communication: embedding people in their neighbourhoods and promoting social interaction and cohesion (see social livelihood). But also, other missions such as promoting sustainability (e.g. with services in repair cafés), can be hampered.

The interviews also hint at a further aspect related to individual health: the double burden of people who are not just privately affected by the COVID pandemic, but also professionally. The interviews show that the COVID pandemic has led to additional workload for organisations which kept working throughout the time of lockdown: observing and implementing new regulations, elaboration and realization of hygiene practices, developing alternative products and services. This extra work required resources in terms of working hours, creativity as well as emotional and social competencies. The consequent threat of exhaustion refers to a range of interview statements including, amongst others, the emotional state of employees, the challenge to handle childcare and work simultaneously, or the readiness for holiday after the lockdown.

#### 4.1.2 Urgency

It might be argued that in deprived neighbourhoods with a long history of economic decline, the sense of urgency regarding economic developments is diminished and may even be replaced by a feeling of resignation. Nevertheless, the COVID pandemic and the severity of the sudden lockdown have given rise to urgency, even in the neighbourhoods in supposedly long-term crisis mode.

The interviews reveal that the urgency to adapt to the new situation varies among the actors. Apparently, one major aspect influencing the degree of active adaptation and willingness to innovate is the financial compensation for the work. On the one hand, unpaid voluntary work tends to be at a standstill or shows only a reluctant implementation of the most necessary means to continue the previous activity (such as a hygiene concept). On the other hand, paid employees are much more willing to find creative solutions and reorganize their services. The interviews hint at the following explanations:

**First**, the most essential local welfare services are in public hands (second sector) or at least supported with basic funding. Thus, they are secured with paid work, while unpaid volunteer work can be suspended temporarily.

**Second**, regardless of their willingness to work, volunteers do not have access to the premises typically used for their activities, as those are provided by third parties, which are responsible for decisions regarding the opening and closing of facilities.

**Third**, volunteers do not feel the economic (financial) pressure to be entrepreneurially active in terms of fast adaptation while paid workers must – to a certain extent – provide proof of performance, whether to their employer or third-party funding agencies. In this sense, standstill is not an option, since it would lead to job loss.

**Fourth**, the general problem of obsolescence in associations has a double impact during the COVID pandemic. On the one hand, many volunteers are part of the risk group, which explains and justifies their reluctance. On the other hand, they often lack the necessary know-how to develop and use potential solutions in the field of digitization, which will be discussed further as a window of opportunity in Section 4.2.

In addition to these higher-level observations regarding the remuneration of work, the analysis also shows that the individual perception of urgency and the corresponding level of engagement of actors varies greatly. Individual actors with above-average commitment, who acted as forerunners, could be found both in unpaid and paid positions. Illustrative examples include the founder of the “Support Your Local Heroes” initiative (König 2020, MitGedacht.-Block 2020)<sup>9</sup> as well as the head of an open meeting place for the homeless, who decided to keep the premises open during the weeks of lockdown while all similar organisations in neighbouring cities were closed (interview 13). This observation supports the importance of individual agency discussed in Section 2.2.

#### 4.1.3 Uncertainty

Regarding the question of the future development of the individual organisations and the local economy in times of COVID, the analysis illustrates the high level of uncertainty that unites all interviewees. The uncertainty is usually expressed in statements regarding non-plannability or a very short-term planning horizon and the constant expectation that the course of events will render all plans invalid. Notwithstanding the above, the interviewees have quite different levels of optimism or pessimism when it comes to predicting the development of their own organisations and the local economy. The spectrum varies from pure optimism to despair. In this sense, uncertainty does not necessarily lead to a negative view on future developments.

### 4.2 Windows of Opportunity, Incremental Innovations and Landscape Changes

In terms of windows of opportunity, the analysis reveals several aspects which can be sorted according to their temporal consistency as well as to their potential regime or landscape changing impact. Table 4 gives an overview of the short-term as well as potential medium- to long-term adjustments, which were revealed by the analysis.

#### 4.2.1 Short-term adjustments

Except for those who have not completely stopped their activities because of the lockdown, most interviewees came up with means and services, which were feasible during the lockdown and under COVID related regulations. Some of these means – although justified in the acute crisis – will prove to be obsolete when the COVID related restrictions no longer apply. Thus, those means provide short-term solutions, but probably do not bring about any long-term adjustments in terms of changes on the regime or landscape levels. These short-term adjustments include the following:

**First**, tidying up, sorting, repairing, renovation and beautifying work – during the weeks of the lockdown.

<sup>9</sup>The initiative was started by an engaged citizen. Supporters can buy a T-Shirt worth 20 Euro. The revenue less costs of production are donated to local companies.



Table 4: Windows of Opportunity according to their temporal consistency and level (MLP)

Short-term adjustments without lasting impact	Medium- to long-term adjustments (incremental changes on regime level)	Medium- to long-term adjustments (changes on landscape level)
<ul style="list-style-type: none"> <li>• Tidying, sorting and renovation work;</li> <li>• Alternative products and services;</li> <li>• Elaboration and implementation of hygiene concepts</li> <li>• Increased use of outside areas;</li> <li>• Cooperation for the use of larger or alternative premises</li> </ul>	<ul style="list-style-type: none"> <li>• Digitization (cashless payment, online booking systems, digitization of course offers, streaming of cultural events)</li> <li>• Introduction and expansion of home-based work (new life and working environments)</li> </ul>	<ul style="list-style-type: none"> <li>• Solidarity and cohesion between local actors</li> </ul>

*Source:* own representation

**Second,** particularly the organisations which continued working throughout the lockdown focused on the elaboration and implementation of alternative products and services in order to continue to serve their target groups and stay in touch. Examples include, amongst others, online streaming of cultural events, the compilation of bags with toys, painting and handicrafts for children from low-income families, letter writing, “read aloud” phone calls, shopping support and cultural walks.

**Third,** adaptation measures related primarily to the development and implementation of hygiene concepts were mentioned in all, but two interviews. According to the interviews, the event industry has very few opportunities to switch to other services. Discotheques and providers of large premises for concerts and major events are affected by high fix costs in terms of rent or rental fees for the premises. Rather than on own innovations, hopes are pinned on subsidies and new hygiene concepts inspired by new scientific findings on the spread of diseases at major events ([Universitätsklinikum Halle \(Saale\)](#), [Medizinische Fakultät der Martin-Luther-Universität Halle-Wittenberg 2020](#)).

**Fourth,** the increased use of outside areas in order to avoid gatherings in closed rooms was mentioned several times, especially by interviewees with gastronomic offers but also as a way to provide seating and conversation opportunities.

**Fifth,** cooperation for the use of larger or alternative premises for group events appeared in several interviews. Those, who actively sought larger premises in order to realize their meetings under the new safety requirements, always found solutions. New collaborations were started in order to fill newly unused spaces with events that were formerly held in smaller rooms.

#### 4.2.2 Medium- to long-term adjustments (incremental changes on regime level)

Furthermore, the interviews revealed some windows of opportunity with the potential to contribute to lasting changes on the regime level. These include the following:

**First, digitization:** At least four interviewees mentioned the implementation or expansion of digital products and services (introduction of online booking system, digitization of course offers, online streaming, increased use of cashless payment). In addition, all interviewees described the new or expanded use of digital communication solutions in their work processes.

**Second, home-based work and team communication:** More than half of the interviewees reported the introduction or expansion of home-based work. They indicated that they believe it will become a permanent fixture in terms of new life and work environments. Most interviewees state that – so far – the overall communication within the organisations did not suffer from alternatives to classic face-to-face communication, including telephone calls, video conferencing and chats. However, the interviews also suggest that home-based work and the associated use of digital communication solutions reinforces pre-existing trends in terms of group communication, both positive and negative. Besides, the authors assume that the effects also depend on the duration of the sole use of digital communication solutions, since informal, yet important intermediate talks are largely absent if no conscious countermeasures are taken.

#### 4.2.3 Medium- to long-term adjustments (changes on landscape level)

The interviews reveal changes in behavioural patterns of interaction, which can be assembled under solidarity and cohesion. As explained below, the authors assign these changes in behavioural patterns of interaction to the landscape level, as they are rooted in a changed prioritisation of values and norms.

According to the interviews, humility, gratitude for local infrastructure as well as the support to local companies are more present since the beginning of the COVID pandemic. They are expressed verbally by customers, but also in their behaviour (norms). Apparently, the shortage of offers due to the lockdown and the following restrictions have increased the customer's awareness of their benefits and made some of them humbler towards their overall living situation.

The analysis suggests that this emotional realignment translates into a strengthened sense of solidarity and cohesion among the actors in the local economy. Examples from the interviews include, amongst others:

- increased cooperative attitude of actors in the local economy, e.g. the public order authorities and customers
- strengthened awareness for consumption of local services and products
- successful crowd funding initiative
- strengthened willingness to donate and support local businesses
- increased awareness for hygiene and the avoidance of infection
- new offers to increase the sense of community

Another important aspect in the discussion of strengthened solidarity in the local context refers to cohesion. The analysis indicates an increase in networking activities, on the one hand in existing networks and on the other hand through the creation of new networks. This is illustrated by these statements: “In my opinion, all the networks that were already – latently – present, work better now. The longing for cooperation is greater.” (author's translation, interview 12). In this context, the hopes also relate to the sustainability of this new quality in cooperation, ideally beyond the time of crisis: “Even after Corona, no one will be able to take this network and this togetherness away from us. No matter what anyone needs or what is going on, we will cooperate, and we will create shortcuts in a dimension, that has never existed before.” (author's translation, interview 12).

The most prominent examples of newly formed networks mentioned in the interviews include the initiatives “Corinna e.V.” ([CORINNA e.V. 2020](#))<sup>10</sup> and “Support Your Local Heroes” (see Section 4.1). However, in both cases, the new networks were formed based

<sup>10</sup>The association of cultural actors in the city of Mönchengladbach was initiated within the first two weeks of the lockdown by an entrepreneur and cultural worker in the entertainment industry, who contacted his professional network via email demanding common action to maneuver together through the coming crisis.

on existing informal networks. They were not created in a vacuum, but through the expansion and reconnection of pre-existing relationships.

Nevertheless, the analysis also shows opposing trends. For example, one interview and a statement from a focus group participant confirm that local networking events were postponed for several months due to the COVID pandemic. According to the interviewees, postponing resulted from the fact that the actors concerned were busy maintaining or adapting their own business activities to the new circumstances with no time left for community-oriented tasks. Another explanation refers to the lack of experience with digital meeting formats, especially of older actors, which prohibited a quick adaptation. One further example for the ambivalent relationship towards solidarity is the rather cynically formulated statement regarding the “opportunity of market cleansing” (and thus decrease in competition) thanks to the COVID pandemic.

## 5 Discussion

Overall, the analysis shows an ambivalent picture regarding the extent to which the COVID pandemic has been affecting the local economy in deprived neighbourhoods in the cities of Mönchengladbach and Krefeld. The interviews do not illustrate a mere downward spiral, but rather opposing effects in a complex process. On the one hand, the individual economic actors are heavily weakened by the measures against the spread of the COVID pandemic. On the other hand, a strengthening of solidarity-oriented behaviour among the actors can be observed. In addition, existing trends towards new life and working environments (home-based work) and digitization are propelled. The different and in part opposite processes weaken and strengthen the socio-economic embeddedness of the local organisations simultaneously. The authors assume that the negative effects will come to a halt as soon as the measures against the spread of the COVID virus are revoked. In contrast, the positive effects in terms of digitization, new work environment and local solidarity are expected to have a lasting effect, changing the regime and landscape levels. In this case, the COVID pandemic would strengthen the socio-economic embeddedness of local actors in the long run.

With reference to the research question regarding the major challenges and their reflection in the typical characteristics of a crisis, the analysis confirms that the findings fit well in the three main dimensions of a crisis; namely (existential) threat, urgency and uncertainty. The findings related to the perceived urgency and the role of remuneration illustrate how important it is not to leave essential local welfare services entirely to voluntary work, but to anchor them institutionally or at least to secure them with basic funding, whenever the target group of services should not remain unattended for a longer period. If those services are covered by paid work, faster rates of adaptation in times of crisis can be expected. The question of which services are most essential cannot be discussed conclusively in this paper. Furthermore, the analysis suggests that a short-term suspension of volunteer activities may not have a major impact. But a medium to longer-term standstill is likely to have worrying consequences in terms of integration and communication, especially in already deprived neighbourhoods relying on their endogenous potential. Therefore, the development of volunteer activities should be given special attention, and supporting measures should be envisaged.

Overall, the search for potential windows of opportunity in the local economy illustrates that it is a matter of standstill or selective incremental adjustments, rather than ground-breaking innovations. Especially organisations committed to the function of integration and communication suffer greatly from the limitation of spatial proximity and the resulting negative effects on personal proximity. Nonetheless, the research question regarding perceived windows of opportunity revealed the two medium- to long-term adjustments – digitization and home-based work. Both trends already existed before the COVID pandemic, but the crisis acts as a catalyst, accelerating the diffusion process and the incremental changes on the regime level (see Section 2.3). In accordance with the considerations within the MLP framework, the analysis shows that the technical prerequisites, e.g. digital communication solutions, were successfully developed on the niche level before the crisis and were therefore promptly available. The COVID pandemic provides

the necessary pressure to disseminate them on the regime level and to ensure that they transform the life and work environment. Nevertheless, the analysis also shows partly opposing trends. None of the potential windows of opportunity at regime or landscape levels is free of contradictions. The “pre- COVID” quality of team communication and networks is also amplified during the crisis, for better or worse. The finding that new networks were built through the expansion and reconnection of pre-existing relationships further suggests that neighbourhoods with well-established network structures are at an advantage in mobilizing endogenous potential and can increase their speed of reaction in times of crisis. Referring to digitization, the analysis reveals that while it can help facilitate some tasks and opens additional communication channels, it is not suitable for all products and services. Offers targeting the function of “integration and communication” especially often depend on spatial and personal proximities. Organisations in this field often deal with social groups with limited or no access to digital services (e.g. children from low-income households, homeless people or elderly people). In this regard, the analysis uncovers problems related to digital inequality. Therefore it will be decisive how digital innovations are designed to increase or decrease socio-economic inequality (Rogers 2003). Besides, organisations wanting to digitalise their offers first need to make significant financial investments in hardware, software and training to translate their products and services into digital formats. This can also be a barrier.

Despite these somewhat contradictory statements, the authors assume that the comparatively acute onset of the crisis, especially in form of the lockdown, and the fact that everyone was affected, greatly emphasized the sense of urgency and togetherness. In contrast to a crisis with a prolonged phase of powerlessness and inactivity, these two aspects led to a rather prompt implementation of support initiatives and solidarity attitudes. This finding relativises the idea of a “delayed response to crisis” by Birkhölzer (see Section 2.2).

The research question of how change processes induced by potential windows of opportunity reflect in the interplay between structure and function is discussed below. Referring to Newig’s typology (see Section 2.2), the organisations in the local economy tend to move towards the area of “system transformation / adaptation” (type 1: preservation of function and structural collapse or complete reorientation). This makes sense, as the individual organisations do not directly reinvent their field of activity, but (initially) strive to continue to fulfil their key function or rather core business despite the crisis. The interviews show that efforts are being made to continue the work, even if it is to a lesser extent or under unprofitable conditions. From an overarching perspective (and in connection with structural changes in the retail sector in general), an increased focus on the quality of stay in neighbourhoods is an essential element of future reorientation (Bunzel, Kühl 2020). This aspect was also discussed in the focus group and mentioned in several interviews. This debate is linked to a reorientation of the mix of uses in local economies and its four core functions. Those trends are accelerated by the COVID crisis. Thus, in the medium to long term, it can be assumed that functional changes will occur. As a result, the local economy will develop towards path-dependent reorientation (type 2: functional collapse or complete reorientation while maintaining structures). The extreme version of a system collapse or complete re-creation (type 3: functional and structural collapse) is a rather theoretical consideration and highly unlikely, as development processes are very dynamic and it cannot be assumed that all structures (especially the institutionalized ones) and functions will break down simultaneously, even if several organisations should be forced to give up.

Despite the limitations explained in Section 3, the analysis suggests three general conditions that can help to perceive and explore potential windows of opportunity in a crisis. First, the simultaneous and comprehensive involvement of all actors. This results in the sense of urgency and involvement triggering understanding, common action and solidarity. Second, well-established and diverse network structures allowing a fast adaptation and exploitation of potential windows of opportunity. Third, the duration of the crisis. If the crisis lasts only shortly, no profound changes might be needed nor occur. By contrast, if it lasts too long, too many actors might fall victim to the related challenges to a point of no return, where recovery is no longer possible.

Referring to the room for manoeuvre inherent in a crisis (Kornberger et al. 2019), the authors suggest the following recommendations based on the context of the presented case study:

- Organisations with essential local public welfare services should be institutionalized or financially secured. Aiming at securing these services, procedures for different crisis scenarios should also be defined.
- A special focus should be on the prompt resumption of volunteer activities, if the incidence of infection allows it.
- There should be a focus on marginalized groups and how to support them best in times of the COVID pandemic. Alternative ways to strengthen integration and communication in the local context should be sought and applied. A focus should be on creative means that help to promote social proximity while overcoming the barrier of spatial distancing.
- The aspect of digital inequality should be handled with care, with a focus on facilitating the access to digital devices and supporting digital participation processes, which allow marginalized groups to be involved.
- Regarding the aspect of solidarity, efforts should be made to support social cohesion and to counteract symptoms of exhaustion. As stated in Section 2.2, an opportunity lies in recognising decay processes and actively controlling or rather shaping them as far as possible. In this sense, promoting a vision building process regarding a desirable post-COVID future (in local economies) might be a suitable tool.
- Continuous efforts should be made to initiate and support local networking processes, as diverse, strong and even informal networks are important assets in times of crises.

## 6 Conclusion

The study realized in deprived inner-city neighbourhoods in Mönchengladbach and Krefeld illustrates that the mobilization of endogenous potential in the local economies is strongly affected by the measures to restrict the spread of the COVID virus. While the mobilization of endogenous potential seems to depend to a great extent on spatial and personal proximities, the restriction of the virus depends on the prevention of the latter.

The study shows how the main characteristics of a crisis reflect in the context of the local economy. The interviews reveal that the (existential) threat consists of economic considerations, the hardly accessible social consequences of a longer period without or with only a minimized range of products and services offered, the (clients') fear of contagion, and exhaustion. The three characteristics of a crisis are also interdependent, for instance the perceived threat is also fed by the omnipresent uncertainty regarding future developments. Concerning the perceived urgency, the spectrum of activity is very wide, from total standstill to above normal engagement and workload. The degree of activism seems to depend on the legal requirements, the (non)remuneration of work, the age of the personnel or volunteers, as well as individual aspects. In total, the activities of the interviewed local organisations committed to communication and integration seem to be at a standstill, or they are continued on a reduced scale. In this sense, the impact of a prolonged crisis on the local economy is worrying.

Regarding windows of opportunity, the analysis indicates several short-term adjustments. Although those are often creative and helpful in the specific situation, they are not expected to have a lasting impact. Furthermore, the study reveals digitization and home-based work as major trends which are propelled by the crisis and therefore lead to (incremental) changes on the regime level. In addition, a shift in values towards local solidarity and cohesion is identified as a potential window of opportunity affecting the landscape level. Of course, the windows of opportunity are subject to reservations. Future developments will show whether the adjustments will sustain and become part of a "new normal".

Referring to Newig's typology of change processes in relation to the preservation or collapse of structure and function, the analysis shows that a "system transformation/adaptation" (type 1) is likely to occur in the short term, as organisations focus on the fulfilment of their functions (core business) while adapting their structures in order to do so. In the medium to long term, however, overarching trends might lead to a reorientation of functions in local economies, resulting in a path-dependent reorientation (type 2).

Altogether, the analysis does provide important insight for further research questions:

- The effects of the COVID pandemic on volunteer work raises many issues,: To what extent does the composition of volunteers change as a result of the crisis (e.g. in terms of age structure and educational level)? Is there a shift in the fields of activity? With what adjustments will voluntary activities be continued?
- Another research gap refers to novel approaches in overcoming the barrier of spatial distancing while supporting personal proximity. What innovative solutions can be established? How can the challenge of digital inequality in participation processes be overcome?
- This also raises the question of what medium- to long-term effects the trends towards digital communication and home-based work (reduced presence at the workplace) will have on the functions of communication and integration in local economies.
- The analysis supports findings regarding the importance of individual and collective agency as key drivers in realizing windows of opportunity and promoting change (Grillitsch, Sotarauta 2019, Kristof 2010). What is the role of promoters in the local economy? How can they be activated and supported?

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